

REMARKS/ARGUMENTS

Claim 1 is pending.

Claim 1 was rejected under 35 U.S.C. Section 102 for allegedly being anticipated by Wakisaka et al., U.S. Pat. No. 6,810,049.

Claim 2 was rejected under 35 U.S.C. Section 103 for allegedly being obvious in view of Wakisaka et al. and Wakisaka et al., U.S. Pub. No. 2003/0151059.

A review of the specification and the drawings was made as requested by the examiner. During the course of the review, a minor informality was identified in Fig. 12B. The reference numeral “2bc” should be replaced with “2b”. A suitable drawing amendment has been made.

Claim 2 has been incorporated into claim 1 and has been canceled accordingly, without prejudice or disclaimer.

An aspect of the present invention is that the “semiconductor laser element is indium-phosphorus, the ... submount is aluminum nitride, and the ... base is copper-tungsten”, where the ratio of thickness to width (T/W) dimensions of the submount is greater than or equal to 0.15. Fig. 5 shows that this combination of materials for the laser element, the base and the submount the proportion of defective devices does not rise until the device experiences 20 MPa of stress or more. It can also be seen in Fig. 4 that only in the case that the submount is aluminum nitride, that the stress is kept within the range of ± 20 MPa when the thickness to width ratio is ≥ 0.15 .

By comparison, though the Wakisaka ‘049 discloses in Fig. 7B that T = 0.2 mm and W = 1.0 mm, they also show a submount of diamond. There is no discussion as to the relative dimensions in where the submount is aluminum nitride. For example, in their Fig. 15, they show aluminum nitride but do not disclose relative dimensions as recited in the pending claim.

In addition, though Wakisada ‘059 discloses an indium-phosphor laser, they do not show or suggest the relative dimensions of an aluminum nitride submount. Moreover, the combination of references fails to show the relative dimensions of an aluminum nitride

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Amendments to the Drawings:

The attached sheet of drawings includes changes to Fig. 12B. This sheet, which includes Fig. 12B replaces the original sheet including Fig. 12B.

Please replace the reference numeral “2bc” with “2b”.

Attachment: Replacement Sheet

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submount. For at least the foregoing reason, the present invention is believed to be patentable over the cited art.

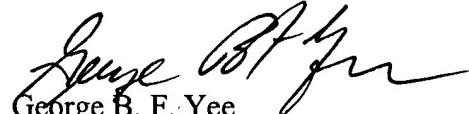
The structure and materials combined as recited in the pending claim has produced unexpected results. Consequently, for at least this reason the present invention is not obvious in view of the cited art.

CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 650-326-2400.

Respectfully submitted,


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